CLAIMS:

1. A circuit arrangement for a remote control receiver which has at least one photodiode for receiving a light signal and generating an output signal, characterized in that the photodiode (1) can be operated in the forward direction operating mode or in the reverse direction operating mode and in that the remote control receiver has a control unit (2) for setting the operating modes of the photodiode (1).

2. A circuit arrangement as claimed in claim 1, characterized in that the control unit (2) has in each case one controlled current source (I1, I2) for setting in each case one of the two operating modes of the photodiode (1).

3. A circuit arrangement as claimed in claim 1 or 2, characterized in that the minus pole of the first current source (I1) is connected to the cathode of the photodiode (1) and the plus pole of the second current source (I2) is connected to the anode.

4. A method of operating a remote control receiver having at least one photodiode for receiving a light signal and generating an output signal, characterized in that the photodiode (1) is operated in the forward direction operating mode or in the reverse direction operating mode and in that a control unit (2) sets the operating mode of the photodiode (1) as a function of the signal level or useful signal level of its output signal.

5. A method as claimed in claim 4, characterized in that during the forward direction operating mode of the photodiode (1) the first current source (I1) is set to zero and the second current source (I2) is set such that the DC voltage across the photodiode (1) lies below its saturation voltage, preferably below 200 mV.

6. A method as claimed in claim 4 or 5, characterized in that the reverse direction operating mode of the photodiode (1) is set when the signal level or useful signal level of the photodiode (1) exceeds a predefined threshold, by the second current source (I2) being set to a higher value than in the forward direction operating mode and the first current source (I1)

being set such that the DC voltage across the photodiode (1) is about half the operating voltage (Ub) of the remote control receiver.

7. A method as claimed in one of claims 4 to 6, characterized in that a controller (3) sets the forward direction operating mode for the photodiode (1) when the end of the received light signal is reached.

8. A circuit arrangement for a remote control receiver which has at least one photodiode for receiving a light signal and generating an output signal, characterized in that a number of photodiodes (D_{A1} ... D_{An}) having the same polarization are arranged as a series circuit (A) and a controlled current source (6) for generating the bias current of the at least one photodiode is connected in parallel with the diode series circuit (A).

9. A circuit arrangement as claimed in claim 8, characterized in that a bipolar transistor (T1), as current regulator, and a junction field effect transistor (JFET) (T2), as controllable resistor, form part of the controlled current source (6).

10. A circuit arrangement as claimed in claim 8 or 9, characterized in that the series circuit (A) of the photodiodes (D_{A1} ... D_{An}) is achieved by splitting the diode area by means of structuring on a chip or wafer.

11. A circuit arrangement as claimed in one of claims 8 to 10, characterized in that the photodiodes (D_{A1} ... D_{An}) of the series circuit (A) are virtually identical.

12. A method of operating a remote control receiver which has at least one receiver module for receiving a light signal, where the receiver module has at least one photodiode for receiving the light signal and one current source for generating the saturation voltage, characterized in that a number of different or identical photodiodes (D_{A1} ... D_{An}), arranged as a series circuit (A), are operated in the forward direction and, when there is incident light, generate a photocurrent (I_{photo}), and in that the AC portion of the photocurrent (I_{photo}) is decoupled by a transimpedance amplifier (7).